

AMENDMENTS TO THE CLAIMS

The Applicant requests to cancel all claims of record and substitute new claims 10 to 20, as follows:

Claim 1 (canceled).

Claim 2 (canceled).

Claim 3 (canceled).

Claim 4 (canceled).

Claim 5 (canceled).

Claim 6 (canceled).

Claim 7 (canceled).

Claim 8 (canceled).

Claim 9 (canceled).

10. A Method for Enhancing Visibility of observation systems comprising:

- a) Focusing the observed scenery, or view, on a Light Controlled Panel;
- b) Processing the focused image by the Light Controlled Panel such that the intensity of the observed scenery elements is controlled within the panel by the intensity of the light focused on each pixel within the Light Controlled Panel, thus generating an enhanced image;
- c) Projecting the said enhanced image to the observer, with or without magnification;

Whereby said light and enhanced image can be of any frequency range in the spectrum.

- 11. Focusing the observed scenery according to claim 10 using an optical array comprised of optical devices, where said optical devices may be based on any of the following technologies:

- Surface Implemented Optics Technology;
- Diffractive Optics;
- Binary Optics;
- Conventional Optics;
- Optical Film Array;
- Holographic Optics.

12. A Light Controlled Panel according to claim 10 wherein said Light Controlled Panel is comprised of pixelated elements, wherein each pixel of the Light Controlled Panel is controlled by an embedded Light Sensitive Element (LSE).

13. A pixelated Light Controlled Panel according to claim 12 wherein each pixel may have any the following properties:

- Reflective;
- Transmissive;
- Polarizing;
- Rotating;
- Directing;
- Phase Shifting.

14. Projecting the processed image according to claim 10 using an optical array, where said optical array is comprised of optical devices based on any of the following technologies:

- Surface Implemented Optics Technology;
- Diffractive Optics;
- Binary Optics;
- Conventional Optics;
- Optical Film Array;
- Holographic Optics.

15. A Visibility Enhancing Method according to claim 10 where the said observed scenery is collimated and manipulated such that the enhanced image appears to be originated from the observed scenery.
16. A Visibility Enhancing Method according to claim 15 where the same devices used for focusing the observed scenery are used for projecting and collimating the said enhanced image.
17. A Method for Enhancing Visibility according to claim 10 whereby the Light Controlled Panel is inserted in the light path of an optical system at a location where an image or a sub-image is created, such that the observed image can be enhanced.
18. A Light Controlled Panel comprising a light control substance, pixel electrodes, light sensitive elements embedded in the light control substance or pixels and associated pixel control mechanism, whereby said pixel control mechanism controls the pixelated light control substance according to the intensity of the light hitting its associated pixel,
Whereby said light control substance and light sensitive elements can be used at any frequency band in the spectrum.
19. A Light Controlled Panel according to claim 18, where said Light Controlled Panel may have the following properties
- Reflective;
 - Transmissive;
 - Polarizing;
 - Rotating;
 - Directing;
 - Phase Shifting.
20. Control mechanism according to claim 18 wherein said control mechanism can control the magnitude of the light processing of the entire Light Controlled Panel.